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ABSTRACT

A study involving four boys (9 to 14 years old) labeled as emotionally handicapped was conducted to examine the effect of a verbal cueing technique (involving an illogical statement which evokes psychological reactance) on behaviorally disordered children. Illogical statements made by the teacher produced positive change in target behaviors (such as yelling out and math performance) for all Ss. (SBH)

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Verbal Cueing as a Behavior Change Instrument

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Currently, there is an increased use of behavior modification techniques in classrooms for exceptional children. These procedures are often laborious and time consuming. In addition, a high level of skill on the part of the teacher may be necessary for successful implementation of these programs. Recently, there has been interest expressed in alternative behavior modification techniques which are easily applied to the typical classroom situation rather than to the confines of a laboratory. One such approach is in the application of the psychological reactance phenomenon.

Brehm (1966) postulated that, for any given individual at any given time, there are a number of behaviors in which that individual feels he could engage, either at the moment or at some time in the future. This set of behaviors is known as the individual's "free behaviors." Brehm goes on to assume that if an individual's behavioral freedom is reduced or threatened with reduction, that individual will become motivationally aroused. This particular arousal would be directed against any further loss of freedom and toward the re-establishment of whatever freedom had already been lost or threatened. This arousal state was named "psychological reactance" and its magnitude was said to be a direct function of the importance to the individual of the threatened behavior, the proportion of free behaviors threatened or eliminated, and the strength of the threat. A number of behavioral effects were predicted to follow the arousal of reactance and which effect would be evident should depend on the type of threat, the threatening agent, and other characteristics of the situation and the threatened individual.

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Three reactions have been demonstrated to occur following the arousal of reactance. First, the threatened or eliminated behavior or goal increases in attractiveness. Brehm, Stires, Sensenig, and Shaban (1966) showed that when a subject believed he was free to choose any one of four records, and the freedom to choose the third most attractive alternative was eliminated, the attractiveness of that record increased.

Wicklund (1970) nad subjects rate the attractiveness of a number of consumer items. Two items were then selected as the choice alternatives and the subjects were informed they could choose either of the two. The subjects were then told there was a nominal tax on the less attractive item. Upon re-ranking, the subjects' preferences were reversed for those two items. The author explains that the slight tax on one of the items served as a threat to the freedom to choose that item and thus evoked psychological reactance. In two similar experiments, Hammock and Brehm (1966) demonstrated the effect of a forced choice on the behavior of children. In both experiments preference rankings were obtained on either candy or toys, subjects were promised choice or no choice for two of the items, subjects were presented one of the items without choice, and re-rankings were obtained. This situation represents virtually no freedom for the subject. He is denied the freedom both to reject the forced alternative and to select the eliminated one. In this instance the theory would predict a decrease in attractiveness of the forced choice and an increase in attractiveness for the eliminated one. These predictions were confirmed. Other studies have reported similar findings (Brehm & Rosen, 1971; Linder & Crane, 1970; Linder, Wortman, & Brehm, 1971; Wicklund, Slattum, & Solomon, 1970).

Second, when a free behavior has been threatened (not eliminated), the individual will often attempt to exercise that freedom by carrying out the

behavior in question. A number of investigators (Brehm & Sensenig, 1966; Jones & Brehm, 1970; Wicklund & Brehm 1968; Worchel & Arnold, 1973) report results indicating that, when a subject's freedom to choose one of two alternatives was threatened by another person's demanding that he take the other alternative, the subject reacted by choosing opposite to the demand.

Third, a threat to or elimination of freedom may cause the individual to react hostilely. Injury to the source of freedom reduction may insure no further threats to freedom and may effectively restore the lost freedom. Worchel and Brehm (1971) reported that subjects evaluated a person who had threatened their freedom choice more negatively than a person who had not threatened their freedom. Similar findings were reported by Brehm and Cole (1966) and Worchel and Brehm (1970). Thus, following the arousal of reactance, one or more of the following will occur: increase in the attractiveness of the threatened or eliminated behavior, attempt to exercise the threatened behavior, and expression of hostility toward the threatened agent.

This brief review of psychological reactance suggests a number of implications for training in exceptional populations. Specifically, it may explain the all too often unsuccessful attempts that are made at eliminating unacceptable behaviors. Our continual discouragement of these behaviors may actually evoke a counterforce which acts to sustain them. The alternative may be that by imposing restrictions on certain behaviors that we actually wish to develop, we may create motivationally heightened interest in that very behavior.

Only 3 studies have dealt with the reactance phenomenon in exceptional children. The first employed retarded individuals. Zucker (1974) had severely and profoundly retarded subjects indicate their preference for different colored M & M's. After this ranking procedure, subjects were told they could

choose any color they wanted for themselves. Before actual choice, however, the experimenters eliminated the subject's fourth choice alternative. On the second ranking, severely retarded subjects increased their preference for the eliminated alternative. There was no change for the profoundly retarded subjects (this was explained as possibly due to a methodological weakness in the procedure). Thus, only severely retarded subjects were sensitive to the reactance manipulation.

The second study dealt with emotionally handicapped children. Ayllon (1975) reported using a verbal cueing technique as a behavior change stimulus with moderate success. He reports the use of two possible procedures that may effect the behavior in question. The first is the possibility that the student may engage in what Ayllon refers to as "cognitive restructuring." That is, the student attempts to reinstate his "free behavior" choice by altering his response to the verbal stimulus presented by the experimenter. The second possibility is that the student is attempting to avoid a verbal aversive stimulus. Both of these possibilities may well be associated with the experimenter evoking psychological reactance in the subject.

The verbal stimulus reported by Ayllon consists of an illogical statement reflecting why the subject engages in an undesirable behavior or does not perform a desired behavior. The illogical statement made by the experimenter must be obvious to the subject and therefore allows him the option of changing his behavior. The illogical stimulus is given only once and explains the behavior in such a way that the subject is free of blame. There is no verbal suggestion as to the behavior that is desired, rather the desired behavior is implied rather than made explicit.

Although Ayllon reports success in changing behavior when using this technique, he warns that as of yet he has not been able to substantiate generalization or maintenance of the new behavior over long periods of time.

The third study conducted by Prieto and Zucker (1977) reports the use of cognitive restructuring with a moderately mentally retarded subject. The authors report that after the introduction of verbal stimulus, the mean number of errors recorded on a response task were reduced from 3.1 to .5. In that study the illogical stimulus was introduced only once to the subject, and the response rate was recorded for 10 days after the stimulus was introduced.

The purpose of the present study is to (1) replicate the procedure with behaviorally disordered children and (2) to examine the possibility of whether the reintroduction of the stimulus would effect the behavior when spontaneous recovery seemed to be occurring.

Method

Subjects

The subjects used in the study were four caucasian males between 9 and 14 years of age. All four subjects had been labeled emotionally handicapped. Two of the subjects were enrolled in self-contained classrooms for mild to moderately handicapped children, the remaining two subjects were enrolled in a special school for severely handicapped students.

Procedures

In each case the target behavior for the subjects was determined by the teachers. Each target behavior had been resistant to the usual procedures used to modify behavior. All four subjects had been in programs where token economies were employed. The usual social reinforcements as well as contingency management programs had been attempted. In at least two instances punishment procedures had also been used.

Results

Subject #1 was a 14 year old caucasian male, enrolled in a special school for severe behaviorally disordered children. The target behavior was verbal outbursts when he was instructed to perform academic tasks. As can be seen by Figure 1, this subject's outbursts were reduced from 3 to .75 per observation period.

Figure 1 Here

The illogical stimulus used with this subject was the natural part in his hair. At the time intervention was introduced, the subject was told that the teacher understood why he made negative statements and engaged in verbal outbursts, and why he could not quietly do his assignments, the reason was, no matter how much he combed his hair it always parted naturally down the middle.

Subject #2 was a 12 year old caucasian male who was enrolled in a self-contained classroom for moderately behaviorally disordered children. The target behavior for this child was yelling out behavior as opposed to hand raising behavior. Efforts had been made to reduce this behavior by use of ignoring, token reinforcement and social praise. None of these procedures were effective in reducing the behavior. As can be seen from Figure 2, this subject's yelling out responses were reduced from 21.4 to 10.8 in the first

Figure 2 Here

treatment period. As can also be noted they were further reduced during the second treatment period to 5.1. This may indicate that reintroduction of the stimulus may have more effect than was previously thought. At the same time

there was an increase in the incompatible behavior of handraising as can be noted from Figure 3. The illogical stimulus used with this subject involved

Figure 3 Here

the following statement: "I understand why you yell out in class instead of raising your hand to get my attention, it is because you have so many freckles."

Subject #3 was an eleven year old caucasian male, enrolled in a self-contained classroom for moderately behaviorally disordered children. This subject, although capable, would not attempt academic tasks assigned. Math performance was selected as the target behavior. He continually rationalized his noncompletion of tasks in a variety of ways. The illogical stimulus used with this subject was: "I understand why you do not do your math assignment, it is because you are not strong enough to hold the pencil."

Figure 4 Here

As can be seen from Figure 4 there was an increase of task performance from 14.4 digits written in a 10 minute period to 39 digits. Also from Figure 5 it can be seen that actual completion of problems done correctly increased from 0 to 1.8. Again, previous efforts to increase performance with this subject included token reinforcement, social reinforcement and successive approximation, none of these procedures were effective in changing the behavior.

Figure 5 Here

Subject #4 was a caucasian male, 9 years of age enrolled in a school for severely emotionally disturbed children. The target behavior was attention to task. The subject was assigned an academic task and his response to the task was recorded. He was allowed 30 seconds to begin work on the assignment. Figure 6 represents his rate of response to academic assignments

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Figure 6 Here

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before and after the stimulus was introduced. The illogical stimulus presented was as follows: "I understand why you cannot begin your work when it is assigned, and that is because you have such big blue eyes." The rate of non-compliance behavior reduced from 4.1 to 3 over 2 treatment periods.

Discussion

Obviously Subject #4's behavior did not change as dramatically as did the three previous subjects. That may be explained by a variety of factors. The severity of this subject's dysfunction may have impaired his ability to respond as did the other subjects. This may suggest that more precision is necessary when dealing with severely behaviorally disordered children, or that this technique has some restrictions when applied to children with severe behavior disorders. The behavior of the other subjects did change somewhat dramatically as has been illustrated. It is the author's contention that the restriction of choice and the need to establish freedom of choice on the part of the subject may well explain the change in behavior. Although far from conclusive, those results may well suggest continued research in this area. Multiple stimuli may be effective with some subjects as evidenced by the data, but selection of subjects seems to be of significant importance as well as adherence to the assumptions previously stated. The author, and others involved

in this kind of research are encouraged by this preliminary effort and feel that with some sophistication, selective subjects may respond to this procedure, when other behavioral approaches do not produce the desired results.

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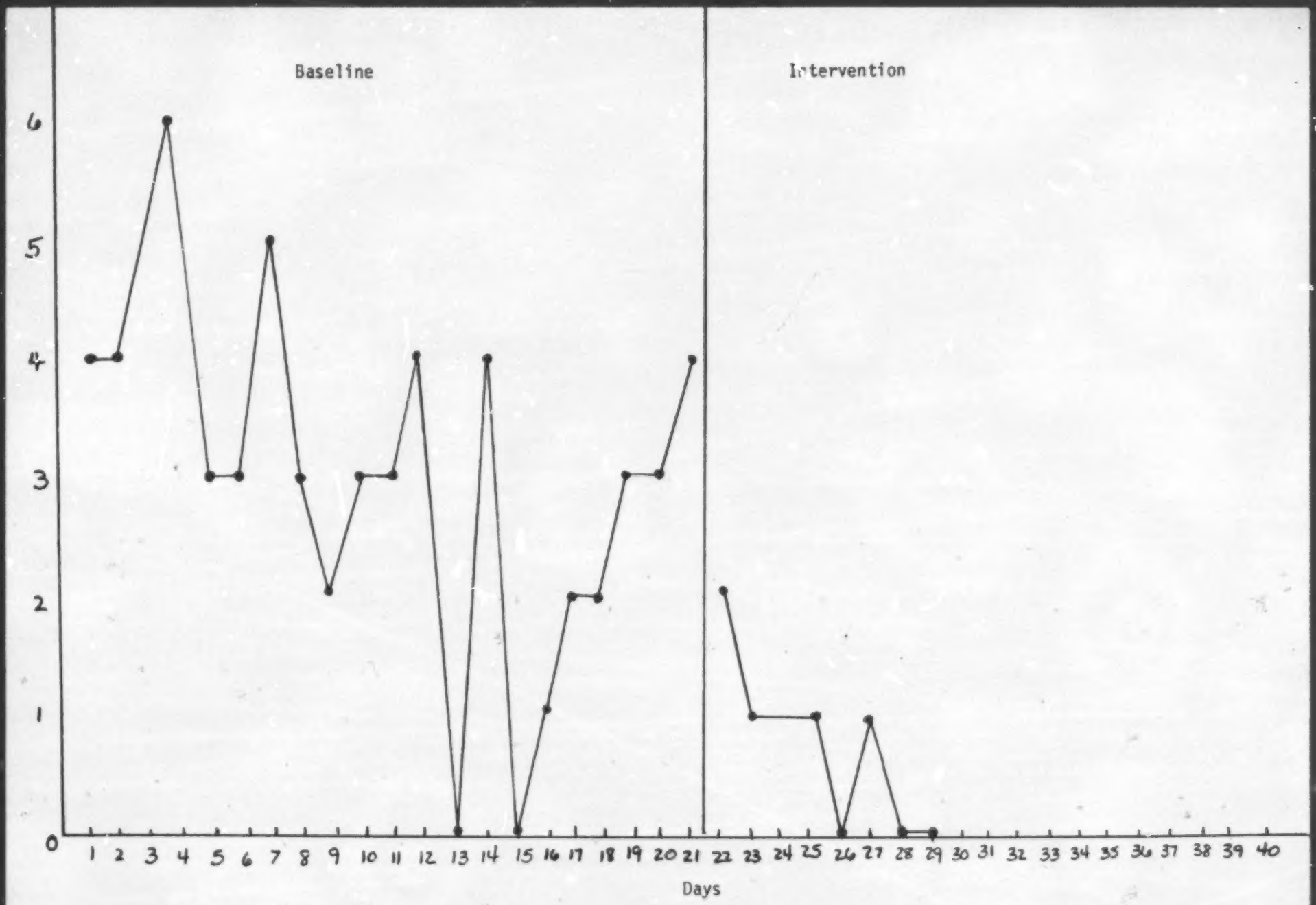

Figure 1 Frequency of Verbal Outbursts

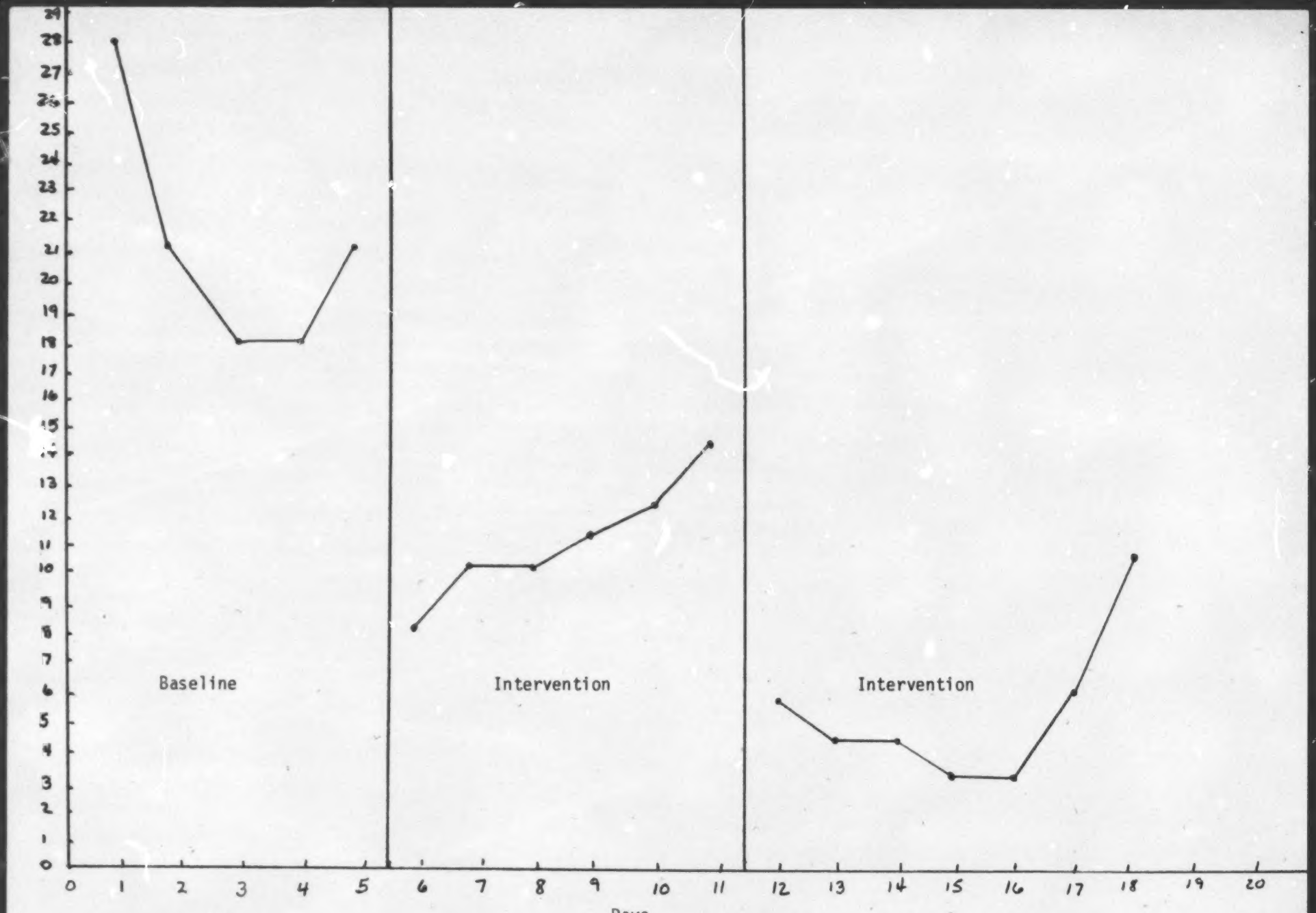

Figure 2 Frequency of "Yelling Out" Behavior

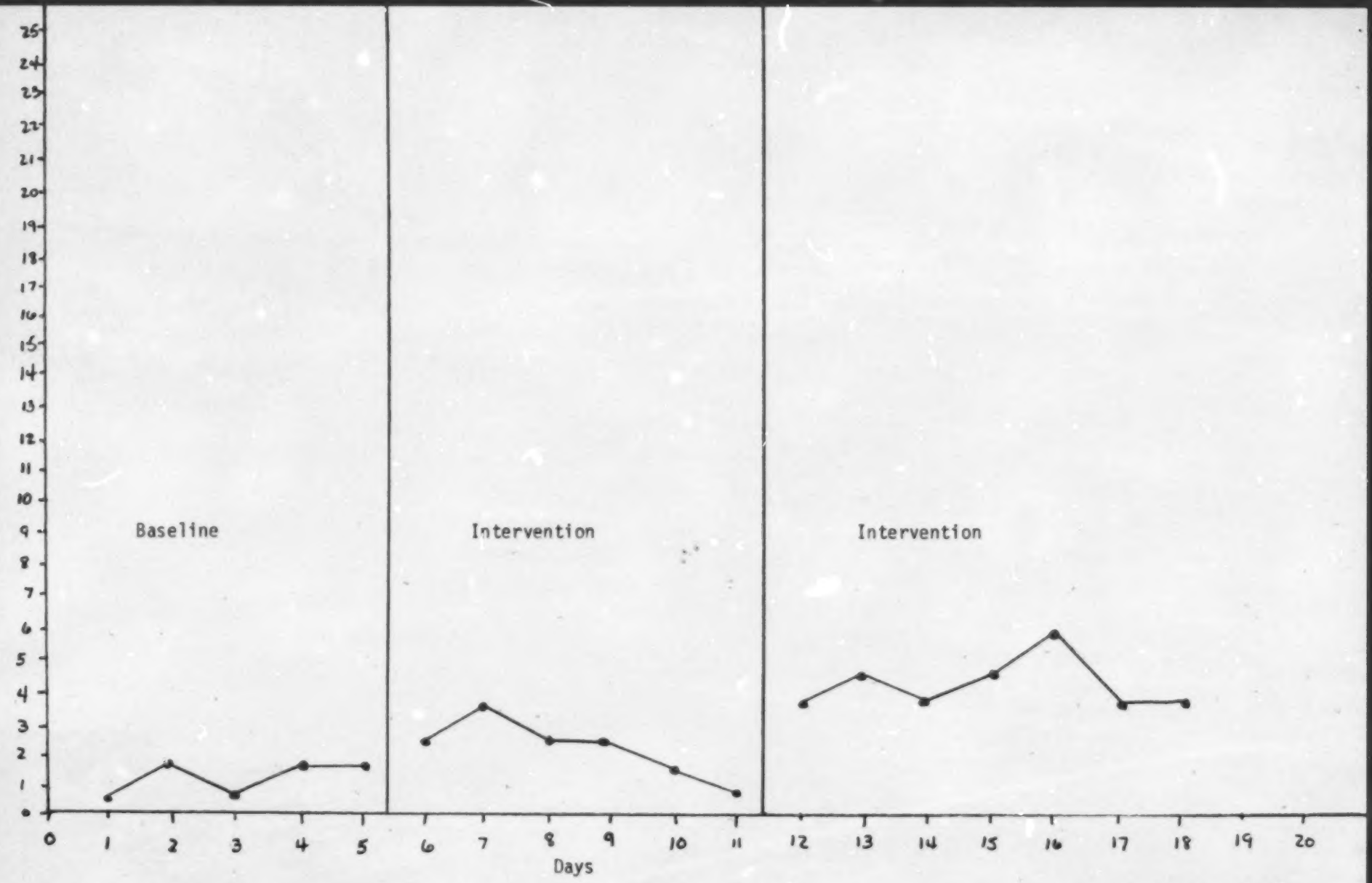

Figure 3 Frequency of "Hand Raising" Behavior

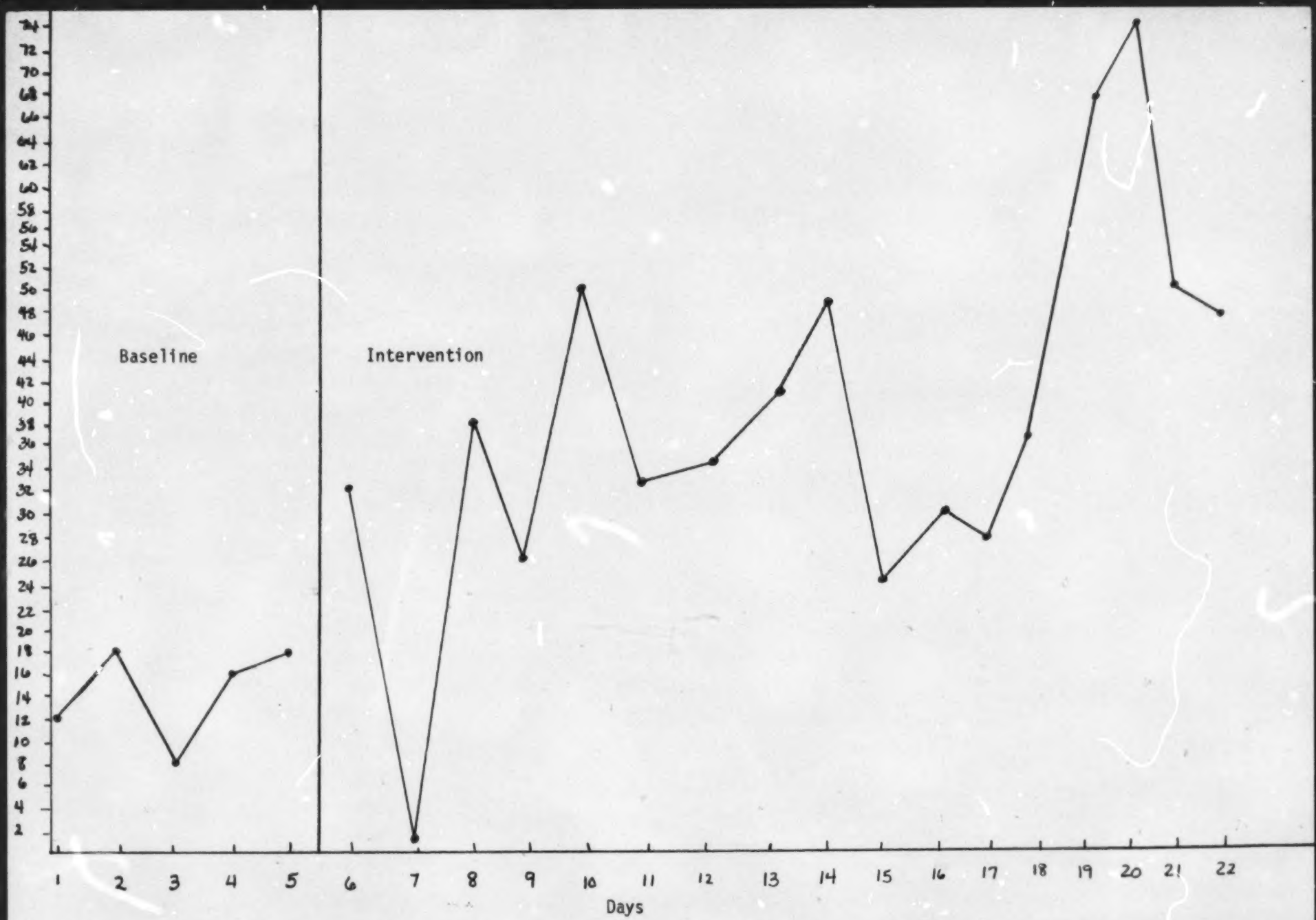

Figure 4 Digits Written in 10 Minutes

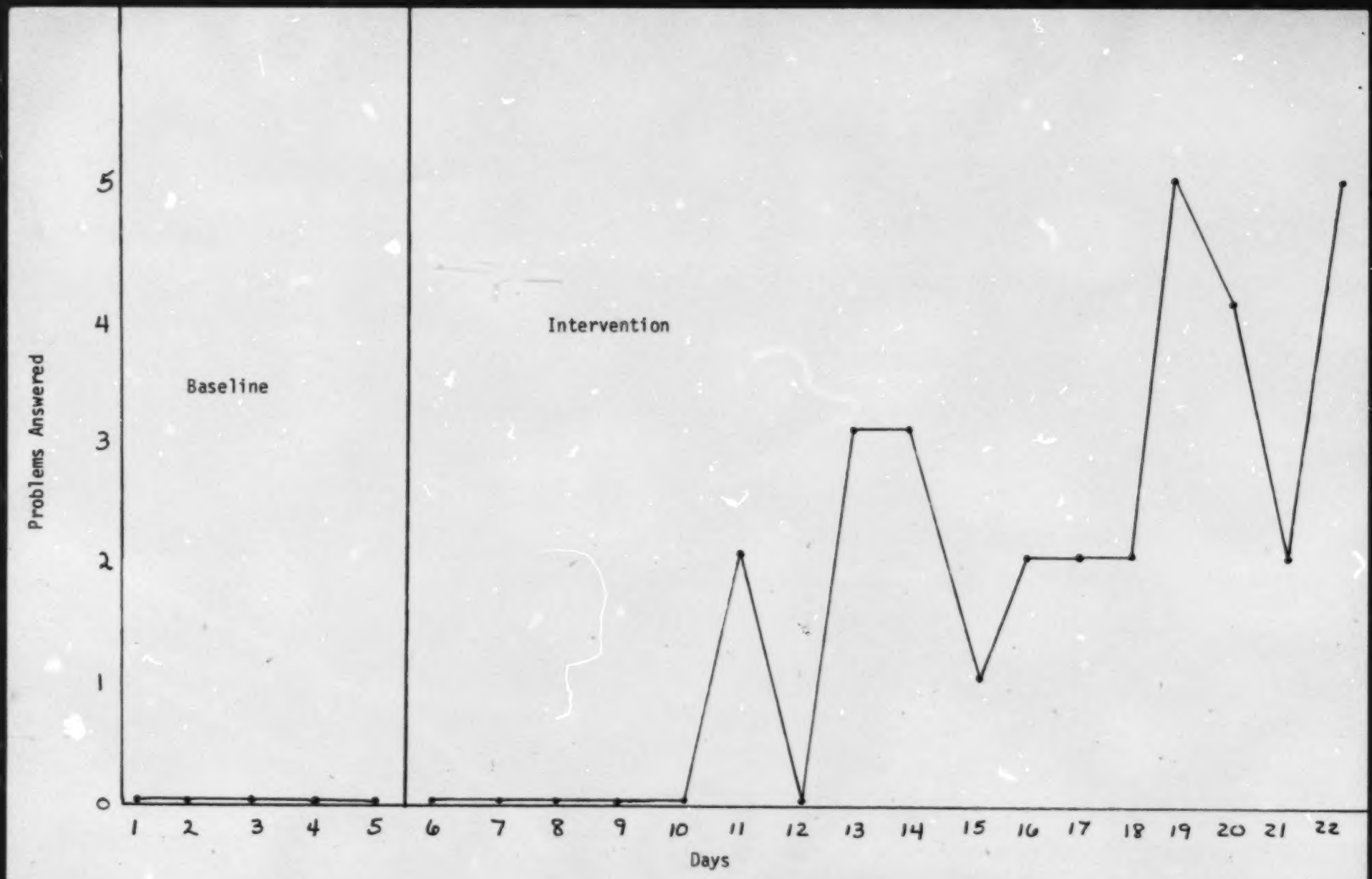

Figure 5 Frequency of Problems Completed Correctly

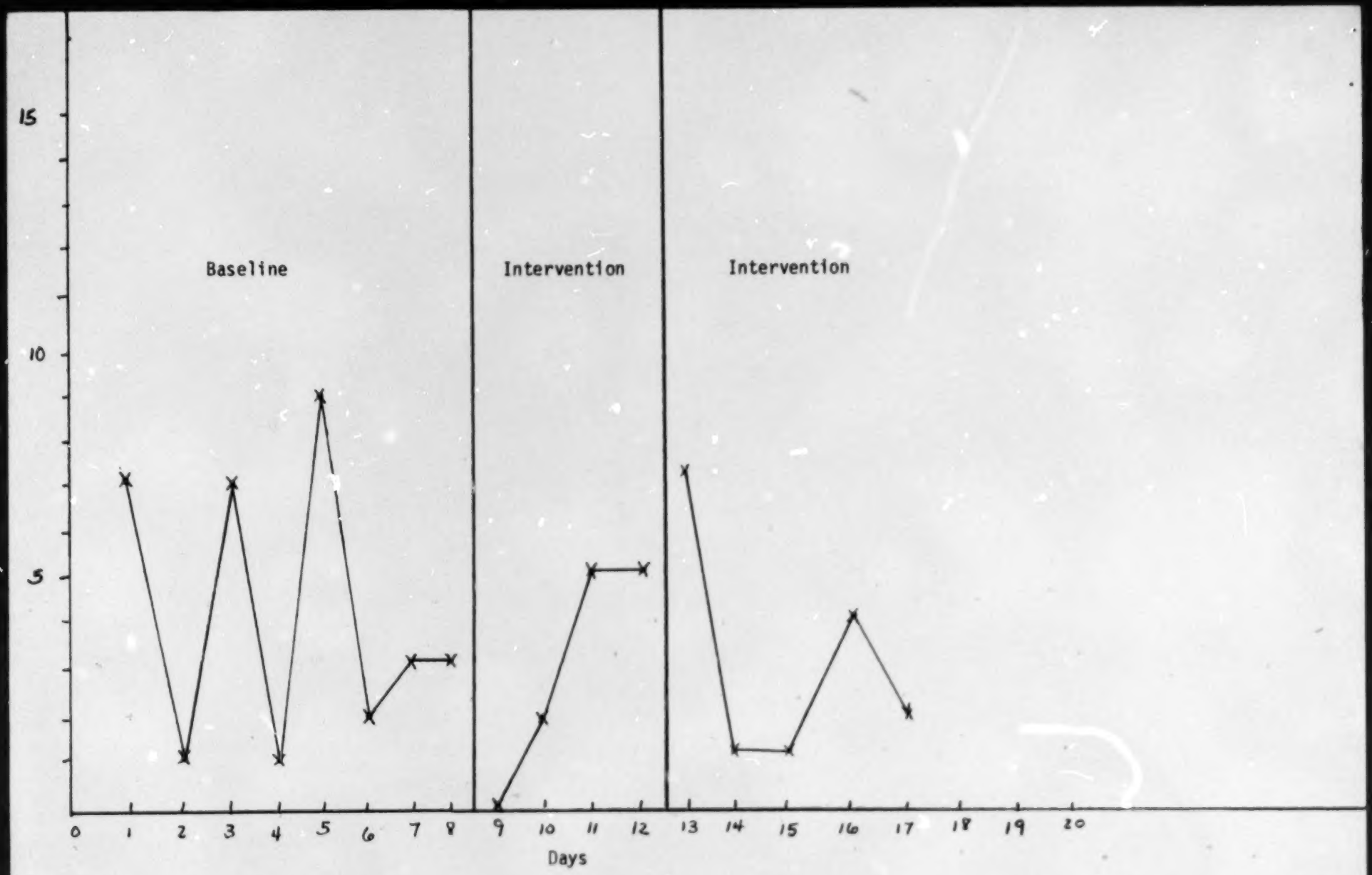

Figure 6 Frequency of Noncompliance Behavior

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